

METHOD AND APPARATUS FOR IMPLEMENTING CACHE COHERENCE WITH ADAPTIVE WRITE UPDATES

ABSTRACT

One embodiment of the present invention provides a system that facilitates cache coherence with adaptive write updates. During operation, a cache is initialized to operate using a write-invalidate protocol. During program execution, the system monitors the dynamic behavior of the cache. If the dynamic behavior indicates that better performance can be achieved using a write-broadcast protocol, the system switches the cache to operate using the write-broadcast protocol.